

<110> INCYTE PHARMACEUTICALS, INC.

LAL, Preeti
GUEGLER, Karl J.
GORGONE, Gina A.
CORLEY, Neil C.
BAUGHN, Mariah R.
TANG, Y. Tom
HILLMAN, Jennifer L.
BANDMAN, Olga
AZIMZAI, Yalda
AU-YOUNG, Janice
YUE, Henry
LU, Dyung Aina M.
YANG, Junming

<120> OXIDOREDUCTASE MOLECULES

<130> PF-0610 PCT

<140> To Be Assigned

<141> Herewith

<150> 09/167,519; unassigned; 09/204,999; unassigned; 60/123,911

<151> 1998-10-06; 1998-10-06; 1998-12-02; 1998-12-02; 1999-10-03

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<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

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| Leu | Leu | Leu | Trp | Gly | Ala | Pro | Trp | Thr | His | Gly | Arg | Arg | Ser | Asn |
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| Val | Arg | Val | Ile | Thr | Asp | Glu | Asn | Trp | Arg | Glu | Leu | Leu | Glu | Gly |
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| Asn | Leu | Gln | Pro | Glu | Trp | Glu | Ser | Phe | Ala | Glu | Trp | Gly | Glu | Asp |
| | | | | 65 | | | | 70 | | | | | 75 | |
| Leu | Glu | Val | Asn | Ile | Ala | Lys | Val | Asp | Val | Thr | Glu | Gln | Pro | Gly |
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| Leu | Ser | Gly | Arg | Phe | Ile | Ile | Thr | Ala | Leu | Pro | Thr | Ile | Tyr | His |

| | | | | | |
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| | 95 | | 100 | | 105 |
| Cys Lys Asp Gly | Glu Phe Arg Arg Tyr | Gln Gly Pro Arg Thr | Lys | | |
| | 110 | | 115 | | 120 |
| Lys Asp Phe Ile | Asn Phe Ile Ser Asp | Lys Glu Trp Lys Ser | Ile | | |
| | 125 | | 130 | | 135 |
| Glu Pro Val Ser | Ser Trp Phe Gly Pro | Gly Ser Val Leu Met | Ser | | |
| | 140 | | 145 | | 150 |
| Ser Met Ser Ala | Leu Phe Gln Leu Ser | Met Trp Ile Arg Thr | Cys | | |
| | 155 | | 160 | | 165 |
| His Asn Tyr Phe | Ile Glu Asp Leu Gly | Leu Pro Val Trp Gly | Ser | | |
| | 170 | | 175 | | 180 |
| Tyr Thr Val Phe | Ala Leu Ala Thr Leu | Phe Ser Gly Leu Leu | Leu | | |
| | 185 | | 190 | | 195 |
| Gly Leu Cys Met | Ile Phe Val Ala Asp | Cys Leu Cys Pro Ser | Lys | | |
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| Arg Arg Arg Pro | Gln Pro Tyr Pro Tyr | Pro Ser Lys Lys Leu | Leu | | |
| | 215 | | 220 | | 225 |
| Ser Glu Ser Ala | Gln Pro Leu Lys Lys | Val Glu Glu Glu Gln | Glu | | |
| | 230 | | 235 | | 240 |
| Ala Asp Glu Glu | Asp Val Ser Glu Glu | Glu Ala Glu Ser Lys | Glu | | |
| | 245 | | 250 | | 255 |
| Gly Thr Asn Lys | Asp Phe Pro Gln Asn | Ala Ile Arg Gln Arg | Ser | | |
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| Leu Gly Pro Ser | Leu Ala Thr Asp Lys | Ser | | | |
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<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No.: 2472577CD1

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| Ile Thr His Ile | Cys Leu Pro Pro Asp | Ser Ser Glu Ala Glu | Ile | | |
| | 20 | 25 | 30 | | |
| Ile Asp Glu Ile | Leu Lys Ile Asn Glu | Asp Thr Arg Val His | Gly | | |
| | 35 | 40 | 45 | | |
| Leu Ala Leu Gln | Ile Ser Glu Asn Leu | Phe Ser Asn Lys Val | Leu | | |
| | 50 | 55 | 60 | | |
| Asn Ala Leu Lys | Pro Glu Lys Asp Val | Asp Gly Val Thr Asp | Ile | | |
| | 65 | 70 | 75 | | |
| Asn Leu Gly Lys | Leu Val Arg Gly Asp | Ala His Glu Cys Phe | Val | | |
| | 80 | 85 | 90 | | |
| Ser Pro Val Ala | Lys Ala Val Ile Glu | Leu Leu Glu Lys Ser | Val | | |
| | 95 | 100 | 105 | | |
| Gly Val Asn Leu | Asp Gly Lys Lys Ile | Leu Val Val Gly Ala | His | | |
| | 110 | 115 | 120 | | |

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Ser | Leu | Glu | Ala | Ala | Leu | Gln | Cys | Leu | Phe | Gln | Arg | Lys | Gly |
| | | | | 125 | | | | | 130 | | | | | 135 |
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| Lys | Thr | Glu | Ser | Arg | Ser | Val | Thr | Arg | Leu | Glu | Cys | Arg | Arg | Val |
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| Gln | Val | Lys | Leu | Tyr | Asp | Ile | Glu | Gln | Gln | Gln | Ile | Arg | Asn | Ala |
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| Leu | Glu | Asn | Ile | Arg | Lys | Glu | Met | Lys | Leu | Leu | Glu | Gln | Ala | Gly |
| | | | | 50 | | | | | 55 | | | | | 60 |
| Ser | Leu | Lys | Gly | Ser | Leu | Ser | Val | Glu | Glu | Gln | Leu | Ser | Leu | Ile |
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| Ser | Gly | Cys | Pro | Asn | Ile | Gln | Glu | Ala | Val | Glu | Gly | Ala | Met | His |
| | | | | 80 | | | | | 85 | | | | | 90 |
| Ile | Gln | Glu | Cys | Val | Pro | Glu | Asp | Leu | Glu | Leu | Lys | Lys | Lys | Ile |
| | | | | 95 | | | | | 100 | | | | | 105 |
| Phe | Ala | Gln | Leu | Asp | Ser | Ile | Ile | Asp | Asp | Arg | Val | Ile | Leu | Ser |
| | | | | 110 | | | | | 115 | | | | | 120 |
| Ser | Ser | Thr | Ser | Cys | Leu | Met | Pro | Ser | Lys | Leu | Phe | Ala | Gly | Leu |
| | | | | 125 | | | | | 130 | | | | | 135 |
| Val | His | Val | Lys | Gln | Cys | Ile | Val | Ala | His | Pro | Val | Asn | Pro | Pro |
| | | | | 140 | | | | | 145 | | | | | 150 |
| Tyr | Tyr | Ile | Pro | Leu | Val | Glu | Leu | Val | Pro | His | Pro | Glu | Thr | Ala |
| | | | | 155 | | | | | 160 | | | | | 165 |
| Pro | Thr | Thr | Val | Asp | Arg | Thr | His | Ala | Leu | Met | Lys | Lys | Ile | Gly |
| | | | | 170 | | | | | 175 | | | | | 180 |
| Gln | Cys | Pro | Met | Arg | Val | Gln | Lys | Glu | Val | Ala | Gly | Phe | Val | Leu |
| | | | | 185 | | | | | 190 | | | | | 195 |
| Asn | Arg | Leu | Gln | Tyr | Ala | Ile | Ile | Ser | Glu | Ala | Trp | Arg | Leu | Val |
| | | | | 200 | | | | | 205 | | | | | 210 |
| Glu | Glu | Gly | Ile | Val | Ser | Pro | Ser | Asp | Leu | Asp | Leu | Val | Met | Ser |
| | | | | 215 | | | | | 220 | | | | | 225 |
| Glu | Gly | Leu | Gly | Met | Arg | Tyr | Ala | Phe | Ile | Gly | Pro | Leu | Glu | Thr |
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| Met | His | Leu | Asn | Ala | Glu | Gly | Met | Leu | Ser | Tyr | Cys | Asp | Arg | Tyr |
| | | | | 245 | | | | | 250 | | | | | 255 |

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Glu | Gly | Ile | Lys | His | Val | Leu | Gln | Thr | Phe | Gly | Pro | Ile | Pro |
| | | | | 260 | | | | | 265 | | | | | 270 |
| Glu | Phe | Ser | Arg | Ala | Thr | Ala | Glu | Lys | Val | Asn | Gln | Asp | Met | Cys |
| | | | | 275 | | | | | 280 | | | | | 285 |
| Met | Lys | Val | Pro | Asp | Asp | Pro | Glu | His | Leu | Ala | Ala | Arg | Arg | Gln |
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| Trp | Arg | Asp | Glu | Cys | Leu | Met | Arg | Leu | Ala | Lys | Leu | Lys | Ser | Gln |
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<221> misc_feature

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| Arg | Ala | Val | Trp | Leu | Thr | Leu | Thr | Ala | Ala | Phe | Leu | Leu | Thr | Leu |
| | | | | 20 | | | | | 25 | | | | | 30 |
| Leu | Leu | Gln | Leu | Leu | Pro | Pro | Gly | Leu | Leu | Pro | Gly | Cys | Ala | Ile |
| | | | | 35 | | | | | 40 | | | | | 45 |
| Phe | Gln | Asp | Leu | Ile | Arg | Tyr | Gly | Lys | Thr | Lys | Cys | Gly | Glu | Pro |
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| Phe | Ser | His | Phe | Tyr | Ile | Ile | Ser | Val | Leu | Trp | Asn | Gly | Phe | Leu |
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| Leu | Trp | Cys | Leu | Thr | Gln | Ser | Leu | Phe | Leu | Gly | Ala | Pro | Phe | Pro |
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| Ser | Trp | Leu | His | Gly | Leu | Leu | Arg | Ile | Leu | Gly | Ala | Ala | Gln | Phe |
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| Gln | Gly | Gly | Glu | Leu | Ala | Leu | Ser | Ala | Phe | Leu | Val | Leu | Val | Phe |
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| Leu | Trp | Leu | His | Ser | Leu | Arg | Arg | Leu | Phe | Glu | Cys | Leu | Tyr | Val |
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| Ser | Val | Phe | Ser | Asn | Val | Met | Ile | His | Val | Val | Gln | Tyr | Cys | Phe |
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| Gly | Leu | Val | Tyr | Tyr | Val | Leu | Val | Gly | Leu | Thr | Val | Leu | Ser | Gln |
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| Val | Pro | Met | Asp | Gly | Arg | Asn | Ala | Tyr | Ile | Thr | Gly | Lys | Asn | Leu |
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| Leu | Met | Gln | Ala | Arg | Trp | Phe | His | Ile | Leu | Gly | Met | Met | Met | Phe |
| | | | | 200 | | | | | 205 | | | | | 210 |
| Ile | Trp | Ser | Ser | Ala | His | Gln | Tyr | Lys | Cys | His | Val | Ile | Leu | Gly |
| | | | | 215 | | | | | 220 | | | | | 225 |
| Asn | Leu | Arg | Lys | Asn | Lys | Ala | Gly | Val | Val | Ile | His | Cys | Asn | His |
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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Arg | Ile | Pro | Phe | Gly | Asp | Trp | Phe | Glu | Tyr | Val | Ser | Ser | Pro | Asn | |
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| Tyr | Leu | Ala | Glu | Leu | Met | Ile | Tyr | Val | Ser | Met | Ala | Val | Thr | Phe | |
| | | | | 260 | | | | | 265 | | | | | 270 | |
| Gly | Phe | His | Asn | Leu | Thr | Trp | Trp | Leu | Val | Val | Thr | Asn | Val | Phe | |
| | | | | 275 | | | | | 280 | | | | | 285 | |
| Phe | Asn | Gln | Ala | Leu | Ser | Ala | Phe | Leu | Ser | His | Gln | Phe | Tyr | Lys | |
| | | | | 290 | | | | | 295 | | | | | 300 | |
| Ser | Lys | Phe | Val | Ser | Tyr | Pro | Lys | His | Arg | Lys | Ala | Phe | Leu | Pro | |
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| Phe | Leu | Phe | | | | | | | | | | | | | |

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<212> PRT

<213> Homo sapiens

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<221> misc_feature

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| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Pro | Asn | Arg | Arg | Val | Leu | Val | Thr | Gly | Ala | Thr | Gly | Leu | Leu | Gly | |
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| Arg | Ala | Val | His | Lys | Glu | Phe | Gln | Gln | Asn | Asn | Trp | His | Ala | Val | |
| | | | | 35 | | | | | 40 | | | | | 45 | |
| Gly | Cys | Gly | Phe | Arg | Arg | Ala | Arg | Pro | Lys | Phe | Glu | Gln | Val | Asn | |
| | | | | 50 | | | | | 55 | | | | | 60 | |
| Leu | Leu | Asp | Ser | Asn | Ala | Val | His | His | Ile | Ile | His | Asp | Phe | Gln | |
| | | | | 65 | | | | | 70 | | | | | 75 | |
| Pro | His | Val | Ile | Val | His | Cys | Ala | Ala | Glu | Arg | Arg | Pro | Asp | Val | |
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| Val | Glu | Asn | Gln | Pro | Asp | Ala | Ala | Ser | Gln | Leu | Asn | Val | Asp | Ala | |
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| Ser | Gly | Asn | Leu | Ala | Lys | Glu | Ala | Asp | Phe | Phe | Phe | Phe | Phe | Val | |
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| Ala | Ala | Val | Gly | Ala | Phe | Leu | Ile | Tyr | Ile | Ser | Ser | Asp | Tyr | Val | |
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| Phe | Asp | Gly | Thr | Asn | Pro | Pro | Tyr | Arg | Glu | Glu | Asp | Ile | Pro | Ala | |
| | | | | 140 | | | | | 145 | | | | | 150 | |
| Pro | Leu | Asn | Leu | Tyr | Gly | Lys | Thr | Lys | Leu | Asp | Gly | Glu | Lys | Ala | |
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| Val | Leu | Glu | Asn | Asn | Leu | Gly | Ala | Ala | Val | Leu | Arg | Ile | Pro | Ile | |
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| Leu | Tyr | Gly | Glu | Val | Glu | Lys | Leu | Glu | Glu | Ser | Ala | Val | Thr | Val | |
| | | | | 185 | | | | | 190 | | | | | 195 | |
| Met | Phe | Asp | Lys | Val | Arg | Phe | Ser | Asn | Lys | Ser | Ala | Asn | Met | Asp | |
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| His | Trp | Gln | Gln | Arg | Phe | Pro | Thr | His | Val | Lys | Asp | Val | Ala | Thr | |
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| Val | Cys | Arg | Gln | Leu | Ala | Glu | Lys | Arg | Met | Leu | Asp | Pro | Ser | Ile | |
| | | | | 230 | | | | | 235 | | | | | 240 | |

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Gly | Thr | Phe | His | Trp | Ser | Gly | Asn | Glu | Gln | Met | Thr | Lys | Tyr |
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| Glu | Met | Ala | Cys | Ala | Ile | Ala | Asp | Ala | Phe | Asn | Leu | Pro | Ser | Ser |
| | | | | 260 | | | | | 265 | | | | | 270 |
| His | Leu | Arg | Pro | Ile | Thr | Asp | Ser | Pro | Val | Leu | Gly | Ala | Gln | Arg |
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| Pro | Arg | Asn | Ala | Gln | Leu | Asp | Cys | Ser | Lys | Leu | Glu | Thr | Leu | Gly |
| | | | | 290 | | | | | 295 | | | | | 300 |
| Ile | Gly | Gln | Arg | Thr | Pro | Phe | Arg | Ile | Gly | Ile | Lys | Glu | Ser | Leu |
| | | | | 305 | | | | | 310 | | | | | 315 |
| Trp | Pro | Phe | Leu | Ile | Asp | Lys | Arg | Trp | Arg | Gln | Thr | Val | Phe | His |
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<221> misc_feature

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| Gly | Ile | Gly | Ala | Gly | Ile | Val | Arg | Ala | Phe | Val | Asp | Ser | Gly | Ala |
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| Arg | Val | Val | Ile | Cys | Asp | Lys | Asp | Glu | Ser | Gly | Gly | Arg | Ala | Leu |
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| Gln | Glu | Asp | Asp | Val | Lys | Thr | Leu | Val | Ser | Glu | Thr | Ile | Arg | Arg |
| | | | | 65 | | | | | 70 | | | | | 75 |
| Phe | Gly | Arg | Leu | Asp | Cys | Val | Val | Asn | Asn | Ala | Gly | His | His | Pro |
| | | | | 80 | | | | | 85 | | | | | 90 |
| Pro | Pro | Gln | Arg | Pro | Glu | Glu | Thr | Ser | Ala | Gln | Gly | Phe | Arg | Gln |
| | | | | 95 | | | | | 100 | | | | | 105 |
| Leu | Leu | Glu | Leu | Asn | Leu | Leu | Gly | Thr | Tyr | Thr | Leu | Thr | Lys | Leu |
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| Ala | Leu | Pro | Tyr | Leu | Arg | Lys | Ser | Gln | Gly | Asn | Val | Ile | Asn | Ile |
| | | | | 125 | | | | | 130 | | | | | 135 |
| Ser | Ser | Leu | Val | Gly | Ala | Ile | Gly | Gln | Ala | Gln | Ala | Val | Pro | Tyr |
| | | | | 140 | | | | | 145 | | | | | 150 |
| Val | Ala | Thr | Lys | Gly | Ala | Val | Thr | Ala | Met | Thr | Lys | Ala | Leu | Ala |
| | | | | 155 | | | | | 160 | | | | | 165 |
| Leu | Asp | Glu | Ser | Pro | Tyr | Gly | Val | Arg | Val | Asn | Cys | Ile | Ser | Pro |
| | | | | 170 | | | | | 175 | | | | | 180 |
| Gly | Asn | Ile | Trp | Thr | Pro | Leu | Trp | Glu | Glu | Leu | Ala | Ala | Leu | Met |
| | | | | 185 | | | | | 190 | | | | | 195 |
| Pro | Asp | Pro | Arg | Ala | Thr | Ile | Arg | Glu | Gly | Met | Leu | Ala | Gln | Pro |
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| Leu | Gly | Arg | Met | Gly | Gln | Pro | Ala | Glu | Val | Gly | Ala | Ala | Ala | Val |
| | | | | 215 | | | | | 220 | | | | | 225 |
| Phe | Leu | Ala | Ser | Glu | Ala | Asn | Phe | Cys | Thr | Gly | Ile | Glu | Leu | Leu |

| | | | | | |
|-----------------|---------------------|---------------------|-----|--|-----|
| | 230 | | 235 | | 240 |
| Val Thr Gly Gly | Ala Glu Leu Gly Tyr | Gly Cys Lys Ala Ser | Arg | | |
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| Ser Thr Pro Val | Asp Ala Pro Asp Ile | Pro Ser | | | |
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<211> 302

<212> PRT

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<220>

<221> misc_feature

<223> Incyte ID No.: 1465978CD1

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| Ala Lys Leu Arg Asp | Leu Ser Arg Glu Asn | Val Leu Ile Thr Gly |
| | 35 | 40 45 |
| Gly Gly Arg Gly Ile | Gly Arg Gln Leu Ala | Arg Glu Phe Ala Glu |
| | 50 | 55 60 |
| Arg Gly Ala Arg Lys | Ile Val Leu Trp Gly | Arg Thr Glu Lys Cys |
| | 65 | 70 75 |
| Leu Lys Glu Thr Thr | Glu Glu Ile Arg Gln | Met Gly Thr Glu Cys |
| | 80 | 85 90 |
| His Tyr Phe Ile Cys | Asp Val Gly Asn Arg | Glu Glu Val Tyr Gln |
| | 95 | 100 105 |
| Thr Ala Lys Ala Val | Arg Glu Lys Val Gly | Asp Ile Thr Ile Leu |
| | 110 | 115 120 |
| Val Asn Asn Ala Ala | Val Val His Gly Lys | Ser Leu Met Asp Ser |
| | 125 | 130 135 |
| Asp Asp Asp Ala Leu | Leu Lys Ser Gln His | Ile Asn Thr Leu Gly |
| | 140 | 145 150 |
| Gln Phe Trp Thr Thr | Lys Ala Phe Leu Pro | Arg Met Leu Glu Leu |
| | 155 | 160 165 |
| Gln Asn Gly His Ile | Val Cys Leu Asn Ser | Val Leu Ala Leu Ser |
| | 170 | 175 180 |
| Ala Ile Pro Gly Ala | Ile Asp Tyr Cys Thr | Ser Lys Ala Ser Ala |
| | 185 | 190 195 |
| Phe Ala Phe Met Glu | Ser Leu Thr Leu Gly | Leu Leu Asp Cys Pro |
| | 200 | 205 210 |
| Gly Val Ser Ala Thr | Thr Val Leu Pro Phe | His Thr Ser Thr Glu |
| | 215 | 220 225 |
| Met Phe Gln Gly Met | Arg Val Arg Phe Pro | Asn Leu Phe Pro Pro |
| | 230 | 235 240 |
| Leu Lys Pro Glu Thr | Val Ala Arg Arg Thr | Val Glu Ala Val Gln |
| | 245 | 250 255 |
| Leu Asn Gln Ala Leu | Leu Leu Leu Pro Trp | Thr Met His Ala Leu |
| | 260 | 265 270 |
| Val Ile Leu Lys Ser | Ile Leu Pro Gln Ala | Ala Leu Glu Glu Ile |
| | 275 | 280 285 |

His Lys Phe Ser Gly Thr Tyr Thr Cys Met Asn Thr Phe Lys Gly
 290 295 300
 Arg Thr

<210> 8
 <211> 300
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No.: 1635966CD1

<400> 8
 Met Lys Phe Leu Leu Asp Ile Leu Leu Leu Leu Pro Leu Leu Ile
 1 5 10 15
 Val Cys Ser Leu Glu Ser Phe Val Lys Leu Phe Ile Pro Lys Arg
 20 25 30
 Arg Lys Ser Val Thr Gly Glu Ile Val Leu Ile Thr Gly Ala Gly
 35 40 45
 His Gly Ile Val Arg Leu Thr Ala Tyr Glu Phe Ala Lys Leu Lys
 50 55 60
 Ser Lys Leu Val Leu Trp Asp Ile Asn Lys His Gly Leu Glu Glu
 65 70 75
 Thr Ala Ala Lys Cys Lys Gly Leu Gly Ala Lys Val His Thr Phe
 80 85 90
 Val Val Asp Cys Ser Asn Arg Glu Asp Ile Tyr Ser Ser Ala Lys
 95 100 105
 Lys Val Lys Ala Glu Ile Gly Asp Val Ser Ile Leu Val Asn Asn
 110 115 120
 Ala Gly Val Val Tyr Thr Ser Asp Leu Phe Ala Thr Gln Asp Pro
 125 130 135
 Gln Ile Glu Lys Thr Phe Glu Val Asn Val Leu Ala His Phe Trp
 140 145 150
 Thr Thr Lys Ala Phe Leu Pro Ala Met Thr Lys Asn Asn His Gly
 155 160 165
 His Ile Val Thr Val Ala Ser Ala Ala Gly His Val Ser Val Pro
 170 175 180
 Phe Leu Leu Ala Tyr Cys Ser Ser Lys Phe Ala Ala Val Gly Phe
 185 190 195
 His Lys Thr Leu Thr Asp Glu Leu Ala Ala Leu Gln Ile Thr Gly
 200 205 210
 Val Lys Thr Thr Cys Leu Cys Pro Asn Phe Val Asn Thr Gly Phe
 215 220 225
 Ile Lys Asn Pro Ser Thr Ser Leu Gly Pro Thr Leu Glu Pro Glu
 230 235 240
 Glu Val Val Asn Arg Leu Met His Gly Ile Leu Thr Glu Gln Lys
 245 250 255
 Met Ile Phe Ile Pro Ser Ser Ile Ala Phe Leu Thr Thr Leu Glu
 260 265 270
 Arg Ile Leu Pro Glu Arg Phe Leu Ala Val Leu Lys Arg Lys Ile
 275 280 285
 Ser Val Lys Phe Asp Ala Val Ile Gly Tyr Lys Met Lys Ala Gln
 290 295 300

<210> 9
 <211> 613
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No.: 1638410CD1

<400> 9
 Met Phe Arg Cys Gly Gly Leu Ala Ala Gly Ala Leu Lys Gln Lys
 1 5 10 15
 Leu Val Pro Leu Val Arg Thr Val Cys Val Arg Ser Pro Arg Gln
 20 25 30
 Arg Asn Arg Leu Pro Gly Asn Leu Phe Gln Arg Trp His Val Pro
 35 40 45
 Leu Glu Leu Gln Met Thr Arg Gln Met Ala Ser Ser Gly Ala Ser
 50 55 60
 Gly Gly Lys Ile Asp Asn Ser Val Leu Val Leu Ile Val Gly Leu
 65 70 75
 Ser Thr Val Gly Ala Gly Ala Tyr Ala Tyr Lys Thr Met Lys Glu
 80 85 90
 Asp Glu Lys Arg Tyr Asn Glu Arg Ile Ser Gly Leu Gly Leu Thr
 95 100 105
 Pro Glu Gln Lys Gln Lys Lys Ala Ala Leu Ser Ala Ser Glu Gly
 110 115 120
 Glu Glu Val Pro Gln Asp Lys Ala Pro Ser His Val Pro Phe Leu
 125 130 135
 Leu Ile Gly Gly Gly Thr Ala Ala Phe Ala Ala Ala Arg Ser Ile
 140 145 150
 Arg Ala Arg Asp Pro Gly Ala Arg Val Leu Ile Val Ser Glu Asp
 155 160 165
 Pro Glu Leu Pro Tyr Met Arg Pro Pro Leu Ser Lys Glu Leu Trp
 170 175 180
 Phe Ser Asp Asp Pro Asn Val Thr Lys Thr Leu Arg Phe Lys Gln
 185 190 195
 Trp Asn Gly Lys Gly Arg Ser Ile Tyr Phe Gln Pro Pro Ser Phe
 200 205 210
 Tyr Val Ser Ala Gln Asp Leu Pro His Ile Glu Asn Gly Gly Val
 215 220 225
 Ala Val Leu Thr Gly Lys Lys Val Val Gln Leu Asp Val Arg Asp
 230 235 240
 Asn Met Val Lys Leu Asn Asp Gly Ser Gln Ile Thr Tyr Glu Lys
 245 250 255
 Cys Leu Ile Ala Thr Gly Gly Thr Pro Arg Ser Leu Ser Ala Ile
 260 265 270
 Asp Arg Ala Gly Ala Glu Val Lys Ser Arg Thr Thr Leu Phe Arg
 275 280 285
 Lys Ile Gly Asp Phe Arg Ser Leu Glu Lys Ile Ser Arg Glu Val
 290 295 300
 Lys Ser Ile Thr Ile Ile Gly Gly Gly Phe Leu Gly Ser Glu Leu
 305 310 315
 Ala Cys Ala Leu Gly Arg Lys Ala Arg Ala Leu Gly Thr Glu Val
 320 325 330

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Ile Gln Leu Phe Pro Glu Lys Gly Asn Met Gly Lys Ile Leu Pro
      335                      340                      345
Glu Tyr Leu Ser Asn Trp Thr Met Glu Lys Val Arg Arg Glu Gly
      350                      355                      360
Val Lys Val Met Pro Asn Ala Ile Val Gln Ser Val Gly Val Ser
      365                      370                      375
Ser Gly Lys Leu Leu Ile Lys Leu Lys Asp Gly Arg Lys Val Glu
      380                      385                      390
Thr Asp His Ile Val Ala Ala Val Gly Leu Glu Pro Asn Val Glu
      395                      400                      405
Leu Ala Lys Thr Gly Gly Leu Glu Ile Asp Ser Asp Phe Gly Gly
      410                      415                      420
Phe Arg Val Asn Ala Glu Leu Gln Ala Arg Ser Asn Ile Trp Val
      425                      430                      435
Ala Gly Asp Ala Ala Cys Phe Tyr Asp Ile Lys Leu Gly Arg Arg
      440                      445                      450
Arg Val Glu His His Asp His Ala Val Val Ser Gly Arg Leu Ala
      455                      460                      465
Gly Glu Asn Met Thr Gly Ala Ala Lys Pro Tyr Trp His Gln Ser
      470                      475                      480
Met Phe Trp Ser Asp Leu Gly Pro Asp Val Gly Tyr Glu Ala Ile
      485                      490                      495
Gly Leu Val Asp Ser Ser Leu Pro Thr Val Gly Val Phe Ala Lys
      500                      505                      510
Ala Thr Ala Gln Asp Asn Pro Lys Ser Ala Thr Glu Gln Ser Gly
      515                      520                      525
Thr Gly Ile Arg Ser Glu Ser Glu Thr Glu Ser Glu Ala Ser Glu
      530                      535                      540
Ile Thr Ile Pro Pro Ser Thr Pro Ala Val Pro Gln Ala Pro Val
      545                      550                      555
Gln Gly Glu Asp Tyr Gly Lys Gly Val Ile Phe Tyr Leu Arg Asp
      560                      565                      570
Lys Val Val Val Gly Ile Val Leu Trp Asn Ile Phe Asn Arg Met
      575                      580                      585
Pro Ile Ala Arg Lys Ile Ile Lys Asp Gly Glu Gln His Glu Asp
      590                      595                      600
Leu Asn Glu Val Ala Lys Leu Phe Asn Ile His Glu Asp
      605                      610

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<210> 10

<211> 325

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No.: 1743409CD1

<400> 10

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Met Val Ser Pro Ala Thr Arg Lys Ser Leu Pro Lys Val Lys Ala
  1                      5                      10                      15
Met Asp Phe Ile Thr Ser Thr Ala Ile Leu Pro Leu Leu Phe Gly
                      20                      25                      30
Cys Leu Gly Val Phe Gly Leu Phe Arg Leu Leu Gln Trp Val Arg

```

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<210> 11
<211> 421
<212> PRT
<213> Homo sapiens
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<400> 11
Met Trp Tyr His Arg Leu Ser His Leu His Ser Arg Leu Gln Asp
      1              5              10              15
```

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Leu | Lys | Gly | Gly | Val | Ile | Tyr | Pro | Ala | Leu | Pro | Gln | Pro | Asn |
| | | | | 20 | | | | | 25 | | | | | 30 |
| Phe | Lys | Ser | Leu | Leu | Pro | Leu | Ala | Val | His | Trp | His | His | Thr | Ala |
| | | | | 35 | | | | | 40 | | | | | 45 |
| Ser | Lys | Ser | Leu | Thr | Cys | Ala | Trp | Gln | Gln | His | Glu | Asp | His | Phe |
| | | | | 50 | | | | | 55 | | | | | 60 |
| Glu | Leu | Lys | Tyr | Ala | Asn | Thr | Val | Met | Arg | Leu | Asp | Tyr | Val | Trp |
| | | | | 65 | | | | | 70 | | | | | 75 |
| Leu | Arg | Asp | His | Cys | Arg | Ser | Ala | Ser | Cys | Tyr | Asn | Ser | Lys | Thr |
| | | | | 80 | | | | | 85 | | | | | 90 |
| His | Gln | Arg | Ser | Trp | Asp | Thr | Ala | Ser | Val | Asp | Leu | Cys | Ile | Lys |
| | | | | 95 | | | | | 100 | | | | | 105 |
| Pro | Lys | Thr | Ile | Arg | Leu | Asp | Glu | Thr | Thr | Leu | Phe | Phe | Thr | Trp |
| | | | | 110 | | | | | 115 | | | | | 120 |
| Pro | Asp | Gly | His | Val | Thr | Lys | Tyr | Asp | Leu | Asn | Trp | Leu | Val | Lys |
| | | | | 125 | | | | | 130 | | | | | 135 |
| Asn | Ser | Tyr | Glu | Gly | Gln | Lys | Gln | Lys | Val | Ile | Gln | Pro | Arg | Ile |
| | | | | 140 | | | | | 145 | | | | | 150 |
| Leu | Trp | Asn | Ala | Glu | Ile | Tyr | Gln | Gln | Ala | Gln | Val | Pro | Ser | Val |
| | | | | 155 | | | | | 160 | | | | | 165 |
| Asp | Cys | Gln | Ser | Phe | Leu | Glu | Thr | Asn | Glu | Gly | Leu | Lys | Lys | Phe |
| | | | | 170 | | | | | 175 | | | | | 180 |
| Leu | Gln | Asn | Phe | Leu | Leu | Tyr | Gly | Ile | Ala | Phe | Val | Glu | Asn | Val |
| | | | | 185 | | | | | 190 | | | | | 195 |
| Pro | Pro | Thr | Gln | Glu | His | Thr | Glu | Lys | Leu | Ala | Glu | Arg | Ile | Ser |
| | | | | 200 | | | | | 205 | | | | | 210 |
| Leu | Ile | Arg | Glu | Thr | Ile | Tyr | Gly | Arg | Met | Trp | Tyr | Phe | Thr | Ser |
| | | | | 215 | | | | | 220 | | | | | 225 |
| Asp | Phe | Ser | Arg | Gly | Asp | Thr | Ala | Tyr | Thr | Lys | Leu | Ala | Leu | Asp |
| | | | | 230 | | | | | 235 | | | | | 240 |
| Arg | His | Thr | Asp | Thr | Thr | Tyr | Phe | Gln | Glu | Pro | Cys | Gly | Ile | Gln |
| | | | | 245 | | | | | 250 | | | | | 255 |
| Val | Phe | His | Cys | Leu | Lys | His | Glu | Gly | Thr | Gly | Gly | Arg | Thr | Leu |
| | | | | 260 | | | | | 265 | | | | | 270 |
| Leu | Val | Asp | Gly | Phe | Tyr | Ala | Ala | Glu | Gln | Val | Leu | Gln | Lys | Ala |
| | | | | 275 | | | | | 280 | | | | | 285 |
| Pro | Glu | Glu | Phe | Glu | Leu | Leu | Ser | Lys | Val | Pro | Leu | Lys | His | Glu |
| | | | | 290 | | | | | 295 | | | | | 300 |
| Tyr | Ile | Glu | Asp | Val | Gly | Glu | Cys | His | Asn | His | Met | Ile | Gly | Ile |
| | | | | 305 | | | | | 310 | | | | | 315 |
| Gly | Pro | Val | Leu | Asn | Ile | Tyr | Pro | Trp | Asn | Lys | Glu | Leu | Tyr | Leu |
| | | | | 320 | | | | | 325 | | | | | 330 |
| Ile | Arg | Tyr | Asn | Asn | Tyr | Asp | Arg | Ala | Val | Ile | Asn | Thr | Val | Pro |
| | | | | 335 | | | | | 340 | | | | | 345 |
| Tyr | Asp | Val | Val | His | Arg | Trp | Tyr | Thr | Ala | His | Arg | Thr | Leu | Thr |
| | | | | 350 | | | | | 355 | | | | | 360 |
| Ile | Glu | Leu | Arg | Arg | Pro | Glu | Asn | Glu | Phe | Trp | Val | Lys | Leu | Lys |
| | | | | 365 | | | | | 370 | | | | | 375 |
| Pro | Gly | Arg | Val | Leu | Phe | Ile | Asp | Asn | Trp | Arg | Val | Leu | His | Gly |
| | | | | 380 | | | | | 385 | | | | | 390 |
| Arg | Glu | Cys | Phe | Thr | Gly | Tyr | Arg | Gln | Leu | Cys | Gly | Cys | Tyr | Leu |
| | | | | 395 | | | | | 400 | | | | | 405 |
| Thr | Arg | Asp | Asp | Val | Leu | Asn | Thr | Ala | Arg | Leu | Leu | Gly | Leu | Gln |
| | | | | 410 | | | | | 415 | | | | | 420 |
| Ala | | | | | | | | | | | | | | |

<210> 12
 <211> 610
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No.: 1867333CD1

<400> 12
 Met Trp Leu Pro Leu Val Leu Leu Leu Ala Val Leu Leu Leu Ala
 1 5 10 15
 Val Leu Cys Lys Val Tyr Leu Gly Leu Phe Ser Gly Ser Ser Pro
 20 25 30
 Asn Pro Phe Ser Glu Asp Val Lys Arg Pro Pro Ala Pro Leu Val
 35 40 45
 Thr Asp Lys Glu Ala Arg Lys Lys Val Leu Lys Gln Ala Phe Ser
 50 55 60
 Ala Asn Gln Val Pro Glu Lys Leu Asp Val Val Val Ile Gly Ser
 65 70 75
 Gly Phe Gly Gly Leu Ala Ala Ala Ala Ile Leu Ala Lys Ala Gly
 80 85 90
 Lys Arg Val Leu Val Leu Glu Gln His Thr Lys Ala Gly Gly Cys
 95 100 105
 Cys His Thr Phe Gly Lys Asn Gly Leu Glu Phe Asp Thr Gly Ile
 110 115 120
 His Tyr Ile Gly Arg Met Glu Glu Gly Ser Ile Gly Arg Phe Ile
 125 130 135
 Leu Asp Gln Ile Thr Glu Gly Gln Leu Asp Trp Ala Pro Leu Ser
 140 145 150
 Ser Pro Phe Asp Ile Met Val Leu Glu Gly Pro Asn Gly Arg Lys
 155 160 165
 Glu Tyr Pro Met Tyr Ser Gly Glu Lys Ala Tyr Ile Gln Gly Leu
 170 175 180
 Lys Glu Lys Phe Pro Gln Glu Glu Ala Ile Ile Asp Lys Tyr Ile
 185 190 195
 Lys Leu Val Lys Val Val Ser Ser Gly Ala Pro His Ala Ile Leu
 200 205 210
 Leu Lys Phe Leu Pro Leu Pro Val Val Gln Leu Leu Asp Arg Cys
 215 220 225
 Gly Leu Leu Thr Arg Phe Ser Pro Phe Leu Gln Ala Ser Thr Gln
 230 235 240
 Ser Leu Ala Glu Val Leu Gln Gln Leu Gly Ala Ser Ser Glu Leu
 245 250 255
 Gln Ala Val Leu Ser Tyr Ile Phe Pro Thr Tyr Gly Val Thr Pro
 260 265 270
 Asn His Ser Ala Phe Ser Met His Ala Leu Leu Val Asn His Tyr
 275 280 285
 Met Lys Gly Gly Phe Tyr Pro Arg Gly Gly Ser Ser Glu Ile Ala
 290 295 300
 Phe His Thr Ile Pro Val Ile Gln Arg Ala Gly Gly Ala Val Leu
 305 310 315

```

Thr Lys Ala Thr Val Gln Ser Val Leu Leu Asp Ser Ala Gly Lys
      320      325      330
Ala Cys Gly Val Ser Val Lys Lys Gly His Glu Leu Val Asn Ile
      335      340      345
Tyr Cys Pro Ile Val Val Ser Asn Ala Gly Leu Phe Asn Thr Tyr
      350      355      360
Glu His Leu Leu Pro Gly Asn Ala Arg Cys Leu Pro Gly Val Lys
      365      370      375
Gln Gln Leu Gly Thr Val Arg Pro Gly Leu Gly Met Thr Ser Val
      380      385      390
Phe Ile Cys Leu Arg Gly Thr Lys Glu Asp Leu His Leu Pro Ser
      395      400      405
Thr Asn Tyr Tyr Val Tyr Tyr Asp Thr Asp Met Asp Gln Ala Met
      410      415      420
Glu Arg Tyr Val Ser Met Pro Arg Glu Glu Ala Ala Glu His Ile
      425      430      435
Pro Leu Leu Phe Phe Ala Phe Pro Ser Ala Lys Asp Pro Thr Trp
      440      445      450
Glu Asp Arg Phe Pro Gly Arg Ser Thr Met Ile Met Leu Ile Pro
      455      460      465
Thr Ala Tyr Glu Trp Phe Glu Glu Trp Gln Ala Glu Leu Lys Gly
      470      475      480
Lys Arg Gly Ser Asp Tyr Glu Thr Phe Lys Asn Ser Phe Val Glu
      485      490      495
Ala Ser Met Ser Val Val Leu Lys Leu Phe Pro Gln Leu Glu Gly
      500      505      510
Lys Val Glu Ser Val Thr Ala Gly Ser Pro Leu Thr Asn Gln Phe
      515      520      525
Tyr Leu Ala Ala Pro Arg Gly Ala Cys Tyr Gly Ala Asp His Asp
      530      535      540
Leu Gly Arg Leu His Pro Cys Val Met Ala Ser Leu Arg Ala Gln
      545      550      555
Ser Pro Ile Pro Asn Leu Tyr Leu Thr Gly Gln Asp Ile Phe Thr
      560      565      570
Cys Gly Leu Val Gly Ala Leu Gln Gly Ala Leu Leu Cys Ser Ser
      575      580      585
Ala Ile Leu Lys Arg Asn Leu Tyr Ser Asp Leu Lys Asn Leu Asp
      590      595      600
Ser Arg Ile Arg Ala Gln Lys Lys Lys Asn
      605      610

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<210> 13

<211> 415

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No.: 2906094CD1

<400> 13

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Met Leu Trp Ser Gly Cys Arg Arg Phe Gly Ala Arg Leu Gly Cys
  1           5           10           15
Leu Pro Gly Gly Leu Arg Val Leu Val Gln Thr Gly His Arg Ser
      20           25           30

```

| | | | |
|---|-----|-----|-----|
| Leu Thr Ser Cys Ile Asp Pro Ser Met Gly Leu Asn Glu Glu Gln | 35 | 40 | 45 |
| Lys Glu Phe Gln Lys Val Ala Phe Asp Phe Ala Ala Arg Glu Met | 50 | 55 | 60 |
| Ala Pro Asn Met Ala Glu Trp Asp Gln Lys Glu Leu Phe Pro Val | 65 | 70 | 75 |
| Asp Val Met Arg Lys Ala Ala Gln Leu Gly Phe Gly Gly Val Tyr | 80 | 85 | 90 |
| Ile Gln Thr Asp Val Gly Gly Ser Gly Leu Ser Arg Leu Asp Thr | 95 | 100 | 105 |
| Ser Val Ile Phe Glu Ala Leu Ala Thr Gly Cys Thr Ser Thr Thr | 110 | 115 | 120 |
| Ala Tyr Ile Ser Ile His Asn Met Cys Ala Trp Met Ile Asp Ser | 125 | 130 | 135 |
| Phe Gly Asn Glu Glu Gln Arg His Lys Phe Cys Pro Pro Leu Cys | 140 | 145 | 150 |
| Thr Met Glu Lys Phe Ala Ser Tyr Cys Leu Thr Glu Pro Gly Ser | 155 | 160 | 165 |
| Gly Ser Asp Ala Ala Ser Leu Leu Thr Ser Ala Lys Lys Gln Gly | 170 | 175 | 180 |
| Asp His Tyr Ile Leu Asn Gly Ser Lys Ala Phe Ile Ser Gly Ala | 185 | 190 | 195 |
| Gly Glu Ser Asp Ile Tyr Val Val Met Cys Arg Thr Gly Gly Pro | 200 | 205 | 210 |
| Gly Pro Lys Gly Ile Ser Cys Ile Val Val Glu Lys Gly Thr Pro | 215 | 220 | 225 |
| Gly Leu Ser Phe Gly Lys Lys Glu Lys Lys Val Gly Trp Asn Ser | 230 | 235 | 240 |
| Gln Pro Thr Arg Ala Val Ile Phe Glu Asp Cys Ala Val Pro Val | 245 | 250 | 255 |
| Ala Asn Arg Ile Gly Ser Glu Gly Gln Gly Phe Leu Ile Ala Val | 260 | 265 | 270 |
| Arg Gly Leu Asn Gly Gly Arg Ile Asn Ile Ala Ser Cys Ser Leu | 275 | 280 | 285 |
| Gly Ala Ala His Ala Ser Val Ile Leu Thr Arg Asp His Leu Asn | 290 | 295 | 300 |
| Val Arg Lys Gln Phe Gly Glu Pro Leu Ala Ser Asn Gln Tyr Leu | 305 | 310 | 315 |
| Gln Phe Thr Leu Ala Asp Met Ala Thr Arg Leu Val Ala Ala Arg | 320 | 325 | 330 |
| Leu Met Val Arg Asn Ala Ala Val Ala Leu Gln Glu Glu Arg Lys | 335 | 340 | 345 |
| Asp Ala Val Ala Leu Cys Ser Met Ala Lys Leu Phe Ala Thr Asp | 350 | 355 | 360 |
| Glu Cys Phe Ala Ile Cys Asn Gln Ala Leu Gln Met His Gly Gly | 365 | 370 | 375 |
| Tyr Gly Tyr Leu Lys Asp Tyr Ala Val Gln Gln Tyr Val Arg Asp | 380 | 385 | 390 |
| Ser Arg Val His Gln Ile Leu Glu Gly Ser Asn Glu Val Met Arg | 395 | 400 | 405 |
| Ile Leu Ile Ser Arg Ser Leu Leu Gln Glu | 410 | 415 | |

<210> 14

<211> 274
 <212> PRT
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No.: 3294314CD1

<400> 14
 Met Ala Ala Ala Glu Pro Ser Pro Arg Arg Val Gly Phe Val Gly
 1 5 10 15
 Ala Gly Arg Met Ala Gly Ala Ile Ala Gln Gly Leu Ile Arg Ala
 20 25 30
 Gly Lys Val Glu Ala Gln His Ile Leu Ala Ser Ala Pro Thr Asp
 35 40 45
 Arg Asn Leu Cys His Phe Gln Ala Leu Gly Cys Arg Thr Thr His
 50 55 60
 Ser Asn Gln Glu Val Leu Gln Ser Cys Leu Leu Val Ile Phe Ala
 65 70 75
 Thr Lys Pro His Val Leu Pro Ala Val Leu Ala Glu Val Ala Pro
 80 85 90
 Val Val Thr Thr Glu His Ile Leu Val Ser Val Ala Ala Gly Val
 95 100 105
 Ser Leu Ser Thr Leu Glu Glu Leu Leu Pro Pro Asn Thr Arg Val
 110 115 120
 Leu Arg Val Leu Pro Asn Leu Pro Cys Val Val Gln Glu Gly Ala
 125 130 135
 Ile Val Met Ala Arg Gly Arg His Val Gly Ser Ser Glu Thr Lys
 140 145 150
 Leu Leu Gln His Leu Leu Glu Ala Cys Gly Arg Cys Glu Glu Val
 155 160 165
 Pro Glu Ala Tyr Val Asp Ile His Thr Gly Leu Ser Gly Ser Gly
 170 175 180
 Val Ala Phe Val Cys Ala Phe Ser Glu Ala Leu Ala Glu Gly Ala
 185 190 195
 Val Lys Met Gly Met Pro Ser Ser Leu Ala His Arg Ile Ala Ala
 200 205 210
 Gln Thr Leu Leu Gly Thr Ala Lys Met Leu Leu His Glu Gly Gln
 215 220 225
 His Pro Ala Gln Leu Arg Ser Asp Val Cys Thr Pro Gly Gly Thr
 230 235 240
 Thr Ile Tyr Gly Leu His Ala Leu Glu Gln Gly Gly Leu Arg Ala
 245 250 255
 Ala Thr Met Ser Ala Val Glu Ala Ala Thr Cys Arg Ala Lys Glu
 260 265 270
 Leu Ser Arg Lys

<210> 15
 <211> 283
 <212> PRT
 <213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No.: 4940951CD1

<400> 15

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ala | Ala | Pro | Phe | Phe | Ser | Thr | Pro | Phe | Gln | Pro | Tyr | Val | Tyr |
| 1 | | | | 5 | | | | | 10 | | | | | 15 |
| Gln | Ser | Gln | Gln | Gly | Ser | Val | Thr | Ala | Phe | Gln | Ile | Ser | Gly | Gly |
| | | | | 20 | | | | | 25 | | | | | 30 |
| Asp | Val | Gln | Val | Leu | Gln | Val | Met | Leu | Lys | Ser | Gln | Glu | Lys | Leu |
| | | | | 35 | | | | | 40 | | | | | 45 |
| Thr | Ala | Lys | Pro | Gly | Ala | Met | Cys | Tyr | Met | Ser | Gly | Asn | Met | Gln |
| | | | | 50 | | | | | 55 | | | | | 60 |
| Met | Asp | Asn | Asn | Tyr | Leu | Pro | Glu | Asn | Asp | Gly | Gly | Val | Trp | Gln |
| | | | | 65 | | | | | 70 | | | | | 75 |
| Trp | Ile | Phe | Gly | Lys | Arg | Val | Ser | Ser | Thr | Ile | Phe | Phe | Asn | Ser |
| | | | | 80 | | | | | 85 | | | | | 90 |
| Gly | Ser | Asp | Asp | Gly | Tyr | Val | Gly | Ile | Ala | Ala | Pro | Phe | Pro | Gly |
| | | | | 95 | | | | | 100 | | | | | 105 |
| Arg | Ile | Leu | Pro | Val | Asp | Leu | Thr | Asn | Phe | Ser | Gly | Glu | Leu | Leu |
| | | | | 110 | | | | | 115 | | | | | 120 |
| Cys | Gln | Ala | Asp | Ala | Phe | Leu | Cys | Ser | Val | Asn | Asp | Val | Ser | Val |
| | | | | 125 | | | | | 130 | | | | | 135 |
| Ser | Ser | Thr | Val | Glu | Pro | Arg | Pro | Arg | Asn | Ile | Glu | Ile | Gly | Ala |
| | | | | 140 | | | | | 145 | | | | | 150 |
| Glu | Met | Ile | Leu | Lys | Gln | Lys | Leu | Arg | Gly | Gln | Gly | Met | Ala | Phe |
| | | | | 155 | | | | | 160 | | | | | 165 |
| Leu | Val | Gly | Gly | Gly | Ser | Val | Met | Gln | Lys | Ile | Leu | Ala | Pro | Arg |
| | | | | 170 | | | | | 175 | | | | | 180 |
| Glu | Val | Ile | Thr | Val | Asp | Ala | Ala | Cys | Ile | Val | Ala | Met | Ser | Ala |
| | | | | 185 | | | | | 190 | | | | | 195 |
| Thr | Ile | Asn | Phe | Gln | Leu | Lys | Ser | Pro | Asn | Gln | Leu | Arg | Arg | Ala |
| | | | | 200 | | | | | 205 | | | | | 210 |
| Val | Phe | Gly | Gly | Asp | Asn | Gln | Leu | Thr | Ala | Ser | Leu | Thr | Gly | Pro |
| | | | | 215 | | | | | 220 | | | | | 225 |
| Gly | Val | Val | Phe | Ile | Gln | Ser | Leu | Pro | Phe | His | Arg | Leu | Ser | Gln |
| | | | | 230 | | | | | 235 | | | | | 240 |
| Arg | Ile | Ala | Ser | Ser | Arg | Ser | Val | Ala | Gly | Pro | Ser | Leu | Arg | Asp |
| | | | | 245 | | | | | 250 | | | | | 255 |
| Asn | Pro | Lys | Phe | Phe | Ile | Gln | Ile | Val | Met | Phe | Phe | Phe | Leu | Ala |
| | | | | 260 | | | | | 265 | | | | | 270 |
| Tyr | Val | Met | Ile | Val | Ser | Ser | Ile | Ile | Leu | Thr | Asp | Val | | |
| | | | | 275 | | | | | 280 | | | | | |

<210> 16

<211> 2471

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No.: 000746CB1

<400> 16

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gctgcgaccg cgctccctgt gaggtgggca agcggcgaaa tggcgccctc cgggagtctt 120
gcagttcccc tggcagtcct ggtgctgttg ctttggggtg ctccctggac gcacgggcg 180
cggagcaacg ttcgcgtcat cacggacgag aactggagag aactgctgga aggagactgg 240
atgatagaat tttatgcccc gtggtgccct gcttgtcaaa atcttcaacc ggaatgggaa 300
agttttgctg aatggggaga agatcttgag gttaatatg cgaaagtaga tgtcacagag 360
cagccaggac tgagtggacg gtttatcata actgctcttc ctactattta tcattgtaaa 420
gatggtgaat ttaggcgcta tcaggggtcca aggactaaga aggacttcat aaactttata 480
agtataaag agtggaagag tattgagccc gtttcatcat ggtttggtcc aggttctgtt 540
ctgatgagta gtatgtcagc actctttcag ctatctatgt ggatcaggac gtgccataac 600
tactttattg aagaccttgg attgccagtg tggggatcat atactgtttt tgcttttagca 660
actctgtttt ccggactgtt attaggactc tgtatgatat ttgtggcaga ttgcttttgt 720
ccttcaaaaa ggcgagacc acagccatac ccataccctt caaaaaaatt attatcagaa 780
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<213> Homo sapiens

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<221> misc_feature

<223> Incyte ID No.: 2472577CB1

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<210> 18

<211> 2026

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PCT/US99/23434

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| gggcctggcg | gcacagcagc | acttgcgttc | tcggggctgt | cgatttctcg | ccacctgggc | 1800 |
| agataacctg | gagattttca | ccttttcttt | tcagcttgat | tgcat ttgac | tatattttac | 1860 |
| agccagtgat | tgtagtttca | tgttaatatg | tgggaaaaata | tttttgtaat | tatttttctaa | 1920 |
| tccctttctg | agtaactctg | ggccctgcac | ttatgaggca | cctaccttca | ttttgctaac | 1980 |
| gcttattctg | aataaaaagtt | tttgattcct | taaaaaaaaa | aaaaaa | | 2026 |

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<210> 19
<211> 1243
<212> DNA
<213> Homo sapiens
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<220>  
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<223> Incyte ID No.: 2591695CB1
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| tgaccgcgcg | cttcctgctg | accctactgc | tgcagctcct | gcgcgccggc | ctgctcccgg | 180 | |
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| caccttttcc | aagctggctt | catggtttgc | tcagaattct | cggggcgcca | cagttccagg | 420 | |
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| tcccatttgg | agactggttt | gaatatgttt | cttcccctaa | ctacttagca | gagctgatga | 840 | |
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| caagttttca | ctgaattgagc | atggcagtcg | cactcaagaa | aatgaatctc | caaagtatct | 1200 | |
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<211> 1921
<212> DNA
<213> Homo sapiens
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<220>
<221> misc_feature
<223> Incyte ID No.: 474100CB1
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WO 00/20604

PCT/US99/23434

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<211> 1261

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No.: 1635966CB1

<400> 23

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<212> DNA

<213> Homo sapiens

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<223> Incyte ID No.: 1638410CB1

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<210> 25

<211> 1278

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No.: 1743409CB1

<400> 25

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<211> 1614

<212> DNA

<213> Homo sapiens

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<221> misc_feature

<223> Incyte ID No.: 1803830CB1

<400> 26

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<211> 3136

<212> DNA

<213> Homo sapiens

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<221> misc_feature

<223> Incyte ID No.: 1867333CB1

<400> 27

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<210> 28

<211> 1594

<212> DNA

<213> Homo sapiens

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<222> 1530

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<220>

<221> misc_feature

<223> Incyte ID No.: 2906094CB1

<400> 28

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<211> 1338

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No.: 3294314CB1

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<211> 1091

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<213> Homo sapiens

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